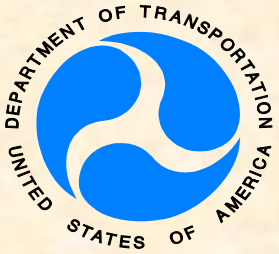


GPS POLICY OVERVIEW

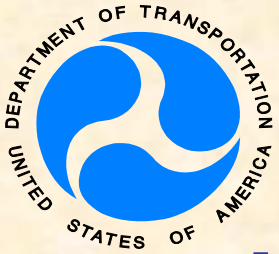
**Civil GPS Service Interface Committee
March 28, 2000**

**Mr. Joe Canny
Deputy Asst. Secretary for Navigation Systems
Policy
US Department of Transportation**



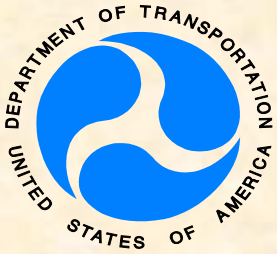
Overview

- **Civil GPS Modernization**
- **Interagency GPS Executive Board**
- **GPS Vulnerability Assessment**
- **GPS Spectrum Issues**
- **Federal Radionavigation Planning**
- **Civil GPS Congressional Outreach**



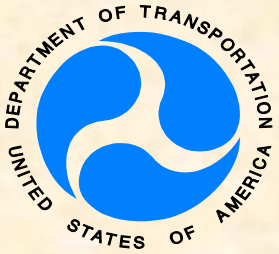
Civil GPS Modernization

- **Implement C/A code on L2 at 1227.60MHz on Block IIR satellites (Up to 12 Satellites)**
 - Same signal characteristics as L1 C/A code
 - Projected to begin launch in 2003
- **Implement C/A code on L2 at 1227.60MHz on all Block IIF satellites**
 - Same signal characteristics as L1 C/A code
 - Projected to begin launch in 2005
- **Implement new safety-of-life signal (i.e. L5) at 1176.45 MHz on all Block IIF satellites**
 - Consistent with the L5 Signal Specification
 - Projected to begin launch in 2005



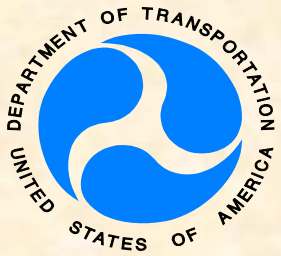
L5 Implementation

- **IGEB directed to resolve technical/
funding problems for implementing L5 in
Dec 1998**
- **Formed L5 Implementation Steering
Group**
- **Report Completed in Nov 1999**
 - **Contained 6 recommendations**
- **Effort Continues on Work Remaining**



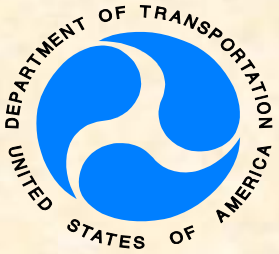
Civil GPS Modernization

- **3rd Civil Signal Implementation**
 - Implement L5 signal structure as proposed
 - Implement high L5 signal power (+6dB higher than L1 C/A code)
 - Increase operational management of Link-16 TSDF
 - Regionally assign DME/TACAN within +/- 9MHz of 1176.45 as necessary in the US
 - Include priced option in full-rate production MIDS request for proposal
 - FY01 Cost to implement these recommendations be borne by department responsible for affected systems



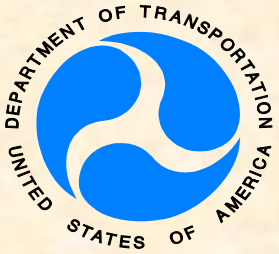
GPS Modernization Issues

- **GPS III Architectural Effort**
 - **Flexibility for technology upgrades**
- **Satellite Launch Strategy**
 - **Achieving IOC/FOC as soon as possible**
- **Updating GPS SPS Signal Specification**
- **International Service**



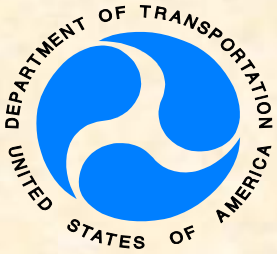
Funding for Civil GPS Modernization

- **President's FY01 Budget Submission**
 - **Added funds to DoD FY01 budget and beyond for Civil GPS Modernization**
 - Funds deployment/acceleration of Civil GPS signals
 - **DOT and DoD developing MOU to:**
 - Describe how civil GPS modernization will be effectively implemented in the future
 - Describe how new civil requirements will be assessed, approved, and funded



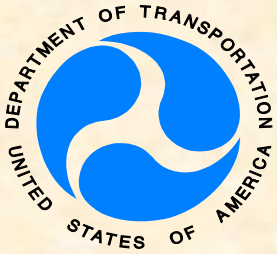
Interagency GPS Executive Board (IGEB)

- **Last meeting held in November 99**
 - **GPS Modernization Alternatives**
 - **L5 Signal Implementation**
 - **FY00/01 Budget Impacts**
 - **International Activities**
 - **SA Termination Timeline**
 - **National Plan for GPS**
- **Next meeting April 7th**



GPS Vulnerability Assessment

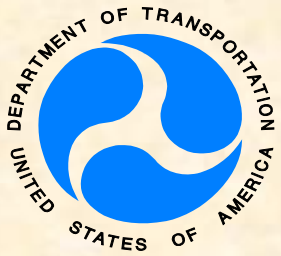
- **PDD-63 Directed DOT to Conduct Independent Vulnerability Study**
 - **Volpe National Transportation System Center**
- **Phase 1 -- Completed July 1999**
 - **Examined railroad, maritime, aviation, & ITS**
 - **Identified vulnerabilities/potential consequences**
- **Phase 2 -- Expected in Summer 2000**
 - **To identify & evaluate risk-mitigation options**
 - **To recommend appropriate mitigation measures**
 - **To be used in DOT decision-making**



Spectrum Issues

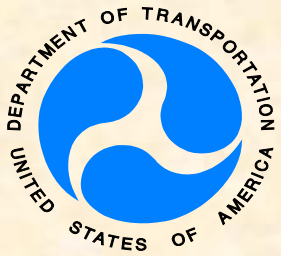
- **WRC 2000**

- **May 8 to June 2nd, 2000 in Istanbul, Turkey**
- **Amb. Gail Schoettler to lead U.S. Delegation**
- **GPS issues:**
 - **Space-to-Space Allocation**
 - **MSS Sharing**
 - **L5 Allocation**
 - **European Frequency Allocation Proposals**



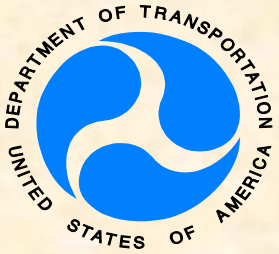
Federal Radionavigation Planning

- **1999 FRP Published Feb 2000**
 - **Reiterates U.S. Commitment to GPS**
 - **Nationwide NDGPS**
 - FY00 - \$5.0M Appropriated
 - FY01 - \$18.7M Requested
 - On target to complete in 2003
 - **Revised schedule for fielding various systems**
 - WAAS/LAAS



Federal Radionavigation Planning

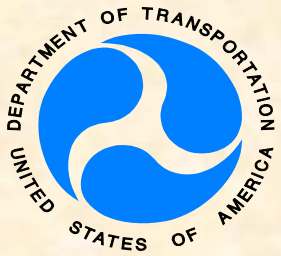
- **Revised schedules for phasedown of land-based systems**
 - **TACAN/VOR/NDB**
 - **ILS/MLS**
 - **LORAN**
- **Next FRP Expected in 2001**



Civil GPS

Congressional Outreach

- **DOT Assistant Secretaries & Agency Heads**
 - Senior DOT executives directed a ONE-DOT GPS outreach effort with Congress
- **Accomplishments to Date**
 - *“National Civilian GPS Services”* brochure
 - White Paper for reference by spokespersons
 - Visits to Congressional staff members began March 7th
 - GPS testimony before Congress given by FAA, FRA, and FHWA Administrators



Civil GPS Congressional Outreach

- **Future Activities**
 - **More visits to Congress through August**
 - **In cooperation with the Department of Defense**
 - **Additional Participation by other civil agencies**
 - **Land & Air DGPS demonstrations (Apr-Jun)**
 - **Outreach with GPS industry**
 - **Industry Trade Fair (Tentative - June 21st)**